

REMARKS/ARGUMENTS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 1-9 and 11-20 are pending in the present application. Claims 1, 9 and 11 are amended and Claims 13-20 are added by the present amendment.¹ Support for the new and amended claims can be found in the original specification, claims and drawings. No new matter is presented.

In the Office Action, Claim 11 is rejected under 35 U.S.C. § 101; and Claims 1-9 and 11-12 are rejected under U.S.C. § 102(e) as anticipated by Shackleford et al. (U.S. Patent No. 6,985,918 B2, hereinafter Shackleford).

Applicants appreciatively acknowledge the courtesy extended by Examiner Zia by holding a personal interview with the Applicants' representatives on May 18, 2010. During the interview, Applicants' invention was discussed in light of the applied reference. The discussion below substantially summarizes the substance of the interview.

The Office Action rejects Claim 11 under 35 U.S.C. § 101 as directed to non-statutory subject matter. In response, Claim 11 has been amended to recite "A non-transitory computer readable recording medium," as suggested in section 4 of the Office Action. Accordingly, Applicants respectfully request that the rejection of Claim 11 under 35 U.S.C. § 101 be withdrawn.

Regarding the rejection of Claims 1-9 and 11-12 under 35 U.S.C. § 102(e) as anticipated by Shackleford, Applicants respectfully submit that independent Claims 1, 9 and 11 recite novel features clearly not disclosed by Shackleford.

¹ Support for new Claims 13 and 14 can be found on p. 21, ll. 4-6, of the specification; support for new Claims 15-16 can be found in Fig. 3 and on p. 21, ll. 31-21; support for new Claims 17-20 can be found in Fig. 5(B) and on p. 31, ll. 8-24.

Applicants note that on p. 4, the Office Action asserts that “Claims of the instant application and the instant application Claims are *obvious* variation of already claimed cited prior art.” However, only a rejection under 35 U.S.C. § 102(e) as being *anticipated* by Shackleford has been made in the Office Action.

It is respectfully noted that a proper anticipation rejection requires that “The identical invention must be shown *in as complete detail as is contained in the ... claim.*” *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). See MPEP §2131. In the present case, it is respectfully submitted that Shackleford fails to disclose or suggest each and every feature of independent Claims 1, 9 and 11, in as great a detail as claimed.

Amended independent Claim 1, for example, recites an apparatus for generating pseudorandom sequences comprising, comprising in part:

cellular automata random number generator of a second type for generating a second sequence *with a second predetermined randomness lower than the first predetermined randomness, and a second predetermined period larger than the first predetermined period*; and
adders for performing bit-to-bit mod2 sum of the first sequences and the second sequences. [Emphasis Added]

Independent Claims 9 and 11, while directed to alternative embodiments, recite similar features.

In making the rejection under 35 U.S.C. § 102(e), the Office Action maintains that col. 3, l. 10 – col. 8, l. 30 of Shackleford discloses all the features of independent Claims 1, 9 and 11. In the cited portion, Shackleford describes a computer automata (CA) based random number generator (RNG) that determines an interconnection topology, screens CA-based RNG candidates based on the interconnection topology, and subjects the RNG candidates through a suite of tests for those that pass the screening process. Shackleford, however, does not disclose or suggest generating pseudorandom sequences using “cellular automata random

number generator of a second type for generating *a second sequence with a second predetermined randomness lower than the first predetermined randomness, and a second predetermined period larger than the first predetermined period.*” Furthermore, Shackleford does not disclose or suggest “*performing bit-to-bit mod2 sum* of the first sequences and the second sequences.”

Since Shackleford fails to disclose or suggest each and every feature of independent Claims 1, 9 and 11, Applicants respectfully request that the rejection of Claims 1, 9 and 11 (and the claims that depend therefrom) under 35 U.S.C. § 102 be withdrawn.

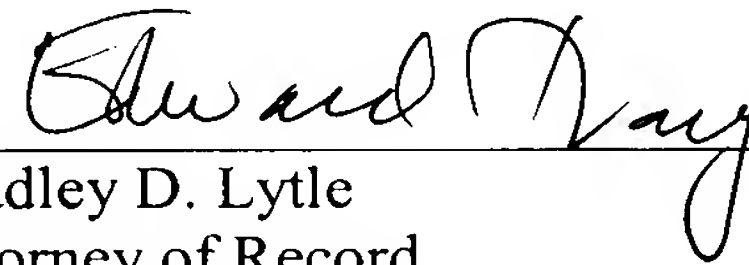
If the present rejection is maintained, applicants respectfully requests that the Office particularly cite portions of Shackleford that disclose or suggest “cellular automata random number generator of a second type for generating a second sequence with a second predetermined randomness lower than the first predetermined randomness, and a second predetermined period larger than the first predetermined period,” and “performing bit-to-bit mod2 sum of the first sequences and the second sequences,” for the purpose of facilitating the appeals process.

Additionally, new Claims 13-17 ultimately depend from independent Claim 1 and new Claims 18-20 ultimately depend from independent Claim 9. Thus, Claims 13-20 are believed to be patentable for at least the reasons discussed above.

In view of the present amendment and in light of the foregoing comments, it is respectfully submitted that Claims 1-9 and 11-20 patentably distinguish over the applied references. The present application is therefore believed to be in condition for allowance and an early and favorable reconsideration of the application is therefore requested.

Respectfully submitted,

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